AMENDMENTS IN THE CLAIMS

1. (Currently Amended) A method of transmitting S sub-codes C_i (i = 0, 1, 2, . . . , S−1) in a transmitter having a sub-code generator for generating the sub-codes C_i from a physical layer packet (PLP) information stream using quasi-complementary turbo codes in a CDMA (Code Division Multiple Access) mobile communication system, the method comprising the steps of:

initially transmitting a first sub-code C_0 and sequentially transmitting the following sub-codes, using quasi-complementary turbo codes, each time a retransmission request is received for the initial transmission or a previous retransmission; and

transmitting the first sub-code C_0 if a retransmission request is received for a last sub-code C_{S-1}, using quasi-complementary turbo codes, and then sequentially transmitting the following sub-codes each time a retransmission request is received.

2. (Original) The method of claim 1, wherein each sub-code is transmitted in one PLP and if the PLP includes a plurality of transmission frames, the sub-code is transmitted in each of the transmission frames.

3. (Original) The method of claim 2, wherein a retransmission request is received for a transmission frame.

4. (Original) The method of claim 2, wherein the transmission frame is a slot.

5. (Currently Amended) A method of transmitting S sub-codes C_i (i = 0, 1, 2, . . . , S−1) to a receiver in physical layer packets (PLPs), each having one or more transmission frames, in response to an initial transmission request and retransmission requests in a transmitter having a sub-code generator for generating the sub-codes C_i from a PLP information stream using quasi-complementary turbo codes in a CDMA (Code Division Multiple Access) mobile communication system, the method comprising the steps of:

initially transmitting a first sub-code C_0 to the receiver;

transmitting a second sub-code C_1 upon receipt of a retransmission request for the first sub-code C_0 from the receiver, and then sequentially transmitting a third to a last sub-codes C_2 to C_{S-1}, using quasi-complementary turbo codes, each time a retransmission request is received from the receiver; and

transmitting the first sub-code C_0 if a retransmission request for the last sub-code C_{S-1} is received, and then sequentially transmitting the second to the last sub-codes C_1 to C_{S-1}, using quasi-complementary turbo codes, each time a retransmission request is received from the receiver.

6. (Original) The method of claim 5, wherein each sub-code is transmitted to the receiver in one PLP and if the PLP includes a plurality of transmission frames, the sub-code is transmitted in each of the transmission frames.

7. (Original) The method of claim 6, wherein a retransmission request is received for a transmission frame.

8. (Original) The method of claim 6, wherein the transmission frame is a slot.

9. (Original) A method of transmitting S sub-codes C_i ($i = 0, 1, 2, \ldots, S-1$) to a receiver in physical layer packets (PLPs), each having one or more transmission frames, in response to an initial transmission request and retransmission requests in a transmitter having a sub-code generator for generating the sub-codes C_i from a PLP information stream using quasi-complementary turbo codes in a CDMA (Code Division Multiple Access) mobile communication system, the method comprising the steps of:

(a~~1~~) setting a count value i to an initial value for initial transmission;

(b~~2~~) transmitting an ith sub-code to the receiver in a transmission frame;

(c~~3~~) determining whether the ith sub-code has been transmitted in all transmission frames of a PLP upon receipt of a retransmission request for the ith sub-code from the receiver;

(d4) transmitting the ith sub-code in a next transmission frame to the receiver if the ith sub-code has not been transmitted in all the transmission frames of the PLP;

(e5) increasing the count value i by 1 if the ith sub-code has been transmitted in all the transmission frames of the PLP;

(f6) returning to step (a1) if the count value i is greater than the number S of the sub-codes and returning to step (b2) if the count value i is less than or equal to the number S of the sub-codes,

wherein all of the subcodes use quasi-complimentary turbo codes.